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ABSTRACT

A study investigated the usefulness of six different but related phonics rules used to pronounce words. The phonics rules examined are: (1) When two vowels are adjacent, the long sound of the first vowel is pronounced and the second is not; (2) When two vowels are separated by one or more consonants and one of the vowels is a final e, the long sound of the first vowel is pronounced and the final e is not; (3) When the only vowel in a one syllable word is not the last letter, the short sound is pronounced; (4) When the only vowel in a one syllable word is the last letter, the long sound is pronounced; (5) When two vowels are separated by two consonants which are not part of a digraph, the syllable division is made between the consonants; and (6) When two vowels are separated by one consonant or a consonant digraph, the syllable division is made before the consonant or digraph. Eighty texts were selected, ranging from third through sixth grade in reading, science, social studies, and trade books. Two sets of the equivalent of five pages of written text were randomly selected from each book. Words for each rule were identified. The appropriate rule was applied and whether the correct pronunciation (or correct syllabication) resulted was determined. Alternate pronunciations were considered equally correct. Utility percentages were calculated for each grade in each subject area, and for each subject area. Results indicated that all six rules should no longer be taught. (Nineteen tables of data are included, and 25 references are attached.) (MM)

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A Research Report

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Acknowledgement

This research was begun as a group project by some 40 students in several sections of a reading course at Illinois State University. They selected the books, the passages, and checked to eliminate duplicate pages. They also marked the pertinent words on the copy of the texts, made the list, and made their own decisions on applicability of the rules.

All the students followed the same written procedure. Each part of the project, from selecting the books on, was done under close supervision of their instructor. Finally student's word lists and all their rule application decisions were re-checked by this writer.

In actual effect, while many participated, all the final applicability decisions were done by one and the same person.

This acknowledgement is to give the students the recognition and thanks due them for their help.

Ivo Greif

The Introduction

Why would one do more phonics utility research? There are reading people who say that doing more phonics utility research is a waste of time, that more than enough has been done already. In some respects they are probably right.

Certainly anyone who examined Clymer's research honestly and objectively should have found it sufficient - certainly even more so, after Bailey, Emans, and others replicated Clymer's research on different word sources, with very similar results.

On the other hand, there are tens of thousands of reading specialists and teachers a) who are unaware of the phonics utility research, or b) know about it but, belittle it, or c) know about it, but aren't inclined to change their instructional emphasis and procedures. As long as these are still with us, we have not had enough research. If it takes research of glacial proportions to bring about change, as it appears it does, then for the children's sake, that much research should be done.

Most reading specialists and teachers, whether they know about the phonics utility research or not, simply teach away in much the same manner as reading has been taught for the past fifty years or more. None would claim that the method has been successful for much more than half of the children. Many even speak about those who succeed, doing so "despite the teaching," and they very well may be right.

The present research was done to contribute to the apparent need to provide evidence of glacial proportions. Another reason for doing this

present project is this: no previous phonic utility research has been done using words taken from running copy from textbooks children are required to use in grade school, or from trade books they are likely to read.

Historical Background of Previous Research

For most of this century, phonic analytic techniques have been universally popular in reading instruction practices. In addition to the speech sound-graphic symbol relationships, a collection of rules came into existence, and children universally were, and still are, taught to use them, in fact, **required** to use them more often than not.

Although **nothing was known** about the origins of those rules, no one seriously questioned them until the late 1950's and the early 1960's, when Clymer did his research investigating their usefulness, or utility, in producing correct pronunciations. Other research projects, which were close replications of Clymer's, but with different word sources, quickly followed his.

Interestingly enough the impetus for the research was provided by a boy in one of Clymer's grade school classes early in his teaching career. Clymer had just taught a phonics rule. The next day this boy, named Ken, brought to class a list of words for which the rule did not produce correct pronunciation. It was a longer list of exceptions than Clymer said he could list of words that were not exceptions. Clymer asked Ken where he got the words, and Ken told him he got them from the dictionary. Clymer remarked as to how you can find all kinds of odd words in the dictionary. Notice that Clymer attempted to disqualify Ken's research by questioning the word source. The next day Ken came with another equally large list which

likewise could not be pronounced correctly using the rule, and said to Clymer that since they came from reading books, he figured that **these** weren't odd words.

Clymer was a little defensive for a day or two and even made a few unkind remarks in the teacher's lounge, but then he realized Ken had done something reading teachers and authorities should have done long ago, and Clymer resolved that he would begin doing it. This is how Clymer came to begin his research project.

Clymer began his research by assembling some 125 then currently taught phonics rules from several basic series. When he began his research he noticed that many of these rules were unclear, inapplicable, and otherwise not understandable and useless. So he stopped, studied the rules and eliminated about 80 of them, leaving 45 generalizations which he believed could be understood and applied. To illustrate that he did not discard some useful ones, one needs but to notice some which he did include, such as:

1. The letter, **r**, gives the preceding vowel a sound that is neither long nor short.

2. When the first vowel element in a word is followed the digraphs **th**, **ch** or **sh**, these digraphs are not divided when the word is syllablized, and may go with either the first or second syllable.

3. When a vowel is in the middle of a one syllable word, it is short.

4. The letter, **a**, has the same sound as **o** when followed by the letter, **l**, **w**, or **u**.

5. The letter, **w**, is sometimes a vowel and follows the vowel digraph rule.

The first rule above informs only what is not. It is useless in sounding out words. One needs to know what **is**.

The second does inform what is, but it is not specific in how to decide which of the two alternatives to use. It also is useless. What it states is also true for other consonant digraphs, even when they follow other vowels in a word than the first vowel.

The third is the traditional terminology for a closed syllable word - one that ends in a consonant. It does not matter where the vowel is, as long as it is not the last letter. The terminology includes words such as **eat** and **oil**, both of which have vowels in the middle - but it is not intended to include them. As stated, it **appears** to apply to nearly 2000 words that it **does not** apply to. It is rather useless in that way.

The fourth is non-specific. It does not inform which of the sounds of **o** should be used, and in fact, rarely would it be long **o**, or short **o**. It, too, is useless

The fifth is non-specific. It does not inform how to decide when **w** is a vowel. Further, unless the **w** is preceded or followed by a vowel, it cannot follow the vowel **digraph** rule. It is useless too.

All of this is to show you that Clymer was not overly zealous when he eliminated questionable rules.

Four other researchers used the same phonics rules that Clymer used in his research. One more used 19 of them. Five other researchers used from one to six of them.

The Previous Research

Since Clymer's research, first reported in 1961, a dozen or more research projects were done, most of them replications of all or part of Clymer's research, but using different word sources. Clymer's word sources were questioned, just as he questioned Ken's. There was the hopeful conviction that different sources would somehow produce different (better) results. Burmeister was the first to show that no matter what the word source, no matter how rules were broken down into parts, the results are essentially the same.

There were repeated suggestions from teachers that if every word in the language served as the word source, the results would be more convincing, and would make people sit up and take notice and change their instructional practices. It was these suggestions that led to the **research using every word in the dictionary**, which was done for six phonics rules. Well, it didn't make people change. It seemed to irritate people instead. They didn't seem to want to take notice. In fact publication of that research was at first refused because the results would focus serious question on the only way left to teach reading now that the "whole word method doesn't wash these days" anymore.

The previous researchers are Clymer (1961 and 1963), Burrows and Lourie (1963), Bailey (1967), Emans (1967), Affleck (1969), Dzama (1975), Burmeister (1968), Bieri (1978), Caldwell (1978), and Greif (1981 through 1987). The projects are listed in the bibliography.

A similar procedure was used for all the above projects. Generally, after the word sources were determined, the lists were examined for words with

certain patterns, for example, words containing adjacent vowels, etc. After all the words with the certain pattern were identified, then it was determined whether or not the phonics rule pertinent to that pattern would produce the correct pronunciation, as indicated by the dictionary. Likewise for other rules and the indicated words. The percent of words for which the rule produced the correct pronunciation was determined, and that percent was called the utility.

Word Sources Used By Previous Researchers

References to previous research will be made at appropriate places in the report. Therefore, it will be helpful to know the word sources used by the various researchers. Information on the word source follows:

Clymer used a list of "some 2600 words," a composite of all words introduced in four "widely used basal series" plus words from the Gates Reading Vocabulary for the Primary Grades.

Bailey used a list of 5,773 words, which included every word which appeared in at least two of eight basal series, grade one through six.

Emans used a list of 1944 words which was a 10% random sample of words rated grade five and above from the Lorge-Thorndike Teachers Word Book of 30,000 Words.

Dzama used a list of 2025 words made from a random sample of the acquired sight vocabulary of 225 first grade children.

Vine used a list of 958 words from the first and second grade of some five basal series plus the Harris Jacobsen Core List.

Affleck used two lists, one of 2000 words for grades one through three, and one of 4000 words for grades four through six, obtained from the first 6000 words on the Lorge-Thorndike Teachers Word Book of 30,000 Words.

Bieri used a list of 1495 words from Feinstein's Programmed College Vocabulary 3600.

Caldwell used the 18,000 most frequently used words on the 1967 Kucera-Francis Word List.

Burrows and Lourie used a list of 5000 words of highest frequency of use from Rinsland's Basic Vocabulary for Elementary School Children.

Greif used all the words in the 138,000 plus New Grolier International Dictionary of the English Language, plus variant forms of words when actually listed. Greif also used all of the words in the 100,000 plus entry Thorndike-Barnhard Advanced Dictionary for several projects.

Findings of these previous researchers will be shown in Table form in the various Parts I through VIII, which follow later in this report.

The Present Research Described

This research project concerns the usefulness of the following phonic rules when used to pronounce words:

1. When two vowels are adjacent to each other in a word, the first vowel is pronounced as long, and the other vowel is not pronounced at all. (VV)

2. When a word contains two vowels one of which is a final **e**, and they are separated by one or more consonants, the first vowel is pronounced as long, and the other is not pronounced at all. (VCE)

3. When the only vowel in a one syllable word **is not** the last letter it is pronounced as short. (VC)

4. When the only vowel in a one syllable word **is** the last letter, it is pronounced as long. (CV)

5. When two vowels in a word are separated by two consonants which are not part of a digraph, the syllable division is made between the two consonants. (VC/CV)

6. When two vowels in a word are separated by one consonant, or a consonant digraph, the syllable division is made before the consonant or the digraph. (V/CV)

In addition, since the first four rules apply to syllables as well as words, they were applied a) to syllables in two syllable words, and b) to syllables in three syllable words, in both cases **after** the words had been correctly syllablized according to the dictionary.

Notice that the first four rules concern vowels. These were chosen because it is the pronunciation of vowels which is most troublesome in phonics. Obviously, if you mispronounce one or more of the vowel elements of a word, you mispronounce the word. However well other rules work is of little, if any, help.

You also will notice that the terminology in the rules is more specific than usual. This researcher's previous experience has shown that in their revised form the rules are more clearly applicable to more words, and generally the utility of them is increased. For one example, the usual statement used by teachers and other researchers for the third rule in the list above is, "a vowel in the middle of a one syllable word is short." It is meant that a vowel (the only vowel) in a closed syllable is short. The words **ar**, **ox**, **up**, **such**, **ship** and **tempt**, are all closed syllable words, but the vowels are not in the middle. The words **ear**, **air**, and **oak** are closed syllable words, and there is a vowel in the middle, but the rule was not meant to apply to such words.

In the above instance, applying the rule as usually taught to all the pertinent words in the dictionary produces a total of 3923 words which have a vowel in the middle, 1534 of which (or 39%) correctly would be pronounced. In its revised form however, it produces 1835 words, 1257 of which (or 68%) correctly could be pronounced. (Greif 1987)

The revisions for other rules did make them clearer to apply, but did not make such dramatic differences as just described. However, there are enough problems applying the rules without additional problems caused by imprecise terminology.

The texts from which the selections were taken ranged from third through sixth grade in the areas of reading, science, social studies, and trade books. They randomly were selected from holdings at University Library Teaching Materials Center. A children's librarian determined the grade level of the trade books. By this process 80 books were selected, distributed as shown below in Table I-A.

Table I-A

Distribution of Randomly Selected Books By Subject Area and Grade Level

Type of Book	Grade Levels				Total for Type
	3	4	5	6	
Reading	5	6	6	5	21
Science	6	5	5	6	22
Social Studies	5	5	5	6	21
Trade	4	4	4	4	16
Total	20	20	20	21	80

Then, from each book, two sets of the equivalent of five full pages of written text randomly were selected.

The resulting number of equivalent pages used for each area at each grade level is shown in Table I-B below.

Table I-B

Number of Pages of Text Used According to Grade Level and Area

Type of Book	Grade Levels				Total for Type
	3	4	5	6	
Reading	45	55	50	40	190
Science	50	45	45	55	195
Social Studies	45	45	45	50	185
Trade	40	40	40	40	160
Totals	180	185	180	185	730

These sets of pages were Xeroxed. Then as the words for each rule were identified, they were highlighted on the copy, and also placed on a separate list. The highlighting was done to show how many words finally remained unused on any list.

Next the appropriate rule was applied and whether or not the correct pronunciation (or correct syllabication) resulted was determined. A collegiate dictionary was used as the criteria source. Alternate pronunciations were considered equally correct. Uncommon names were not listed. Duplicate use was not listed for the research, but duplicate words were highlighted on the Xerox copy. The letter, y, was considered a vowel,

and short **i**, long **e**, and long **i** were considered the correct pronunciations. Each decision was then double checked by the same other person. Finally, utility percentages were calculated a) for **each grade** in each subject area, and b) for each subject area. The results follow in Parts I through IX.

Plan of Report of Present Research

The present research, though under one major title, investigated the usefulness of six different but related phonic rules. The findings for each of those six will be reported in separate Parts, I through IX.

The organization for each part follows the same general pattern which is as follows: **first**, the specific topic is given, **second**, the previous research results are shown in table form, **third**, the findings of the present research are given, also in table form, and **fourth**, comments and explanations are given.

After Part IX there is a section on conclusions, and recommendations, and observations.

Report of the Present Research

Part I

The Topic

Part I of this report of the results of the present study deals with the usefulness of the following rule when used to pronounce the pattern-indicated words:

> **When two vowels are adjacent to each other in a word the first vowel is pronounced as long and the second vowel is not pronounced at all. (VV)**

The Previous Research

Table II below shows the results obtained by ten previous researchers in **twelve research projects** on the usefulness of the above stated rule when used to pronounce words.

Table II

Utility of the "VV Rule" as Reported by the Ten Previous Researchers Listed Herein:

Researcher	# of VV Words in in Sample	# Not Conforming to VV Rule	# Conforming to VV Rule	Percent of Utility
Clymer (1961)	553	294	259	47%
Clymer 1963	686	377	309	45%
Burrows and Lourie (1963)	1728	1060	668	39%
Bailey (1967)	1732	1146	586	34%
Emans (1967)	480	393	87	18%
Affleck (1969)[2]				49-54%
Dzama (1975)	697	682	285	41%
Bieri (1978)[1]				6%
Vine (1978)	958	564	394	41%
Caldwell (1978)	6058	4780	1728	26%
Greif (1981)	37,828	32,527	5301	14%
Greif (1988)[3]	36,037	30,726	5301	14.7%

[1]Bieri reported only percent of utility.
[2]Affleck reported only a range of utility over 3 vocabularies.
[3]Greif revised the 1981 study to remove words containing **tion** and **sion** patterns which are highly consistent in pronunciation and proper to a separate rule.

The Present Research

Table III immediately below shows the same data and utility as shown in Table II, which were obtained in the present study, listed by subject matter area, and by totals.

Table III

The Usefulness of the VV Rule in Pronouncing Two Vowel Words with that Vowel Pattern, from Elementary Textbooks & Tradebooks, as Determined by the Present Study

Area of Book	Total # of Words	# Not Conforming	# Conform-ing	Percent of Utility
Reading	3007	2031	976	32.5%
Science	2422	1626	796	32.9%
Social Studies	2698	1786	912	33.8%
Trade	2333	1515	818	35.1%
All four	10,460	6958	3502	33.6%

Notice that in the previous research, the higher the number of pertinent words, the lower the percent of utility. The utility found in the present study is quite close to that obtained by Burrows and Lourie, Bailey, and Caldwell, who used large lists.

The data from the present study indicate there is little difference in the usefulness of the VV rule from one subject to another. One noteworthy thing is that the utility for reading is the lowest. Generally, it is thought that

producers of reading series texts purposely select words to favor the working of phonics rules. This does not appear to be true, even across the grades, for words pertaining to **this** rule. Likewise, there is little difference in utility percentages which, **in grades three-through-six order**, are:

31.5, 34.6, 30.9, and 31.6% for reading
31.8, 31.7, 31.5, and 35.8% for science
33.5, 33.3, 32.1, and 31.8% for social studies
38.6, 35.9, 32.4, and 34.9% for trade books.

It certainly seems clear that teaching children to use the VV phonics rule to sound out the pronunciation of words is **very bad advice**.

Part II

The Topic

Part II of this report of the results of the present study deals with the usefulness of the following rule when used to pronounce the pattern-indicated words:

> **When a word contains two vowels, one of which is an final e, and they are separated by one or more consonants, the first vowel is pronounced as long, and the final e is silent. (VCE)**

The Previous Research

Table IV below shows the results obtained by eight previous researchers in **ten research projects** on the usefulness of the above stated rule when used to sound out the pronunciation of words.

Table IV

Results from Ten Previous Research Projects
on the Utility of the VCE Phonics Rule

Researcher	Total VCE Words in Sample	Number Not Conforming	Number Conforming	% of Utility
Clymer (1961)	220	77	143	65%
Clymer (1963)	228	108	180	63%
Bailey (1967)	578	248	330	57%
Emans (1967)	59	22	37	63%
Affleck (1969)[1]				60-76%
Dzama (1975)	172	56	116	67%
Bieri (1977)[2]				56%
Caldwell (1978)	2212	1271	941	42%
Greif (1980)[3]	7687	3592	4095	53%
Greif (1987)[4] a)	8784	4707	4076	46.4%
b)	558	145	413	74%
c)	7285	3959	3326	54.3%

[1]Affleck reported only a range of utilities.
[2]Bieri gave only percent of utility.
[3]Greif used only VCE pattern. All others used VCCE as well.
[4]Greif used for a) all 2 vowel words ending in VCE, VCCE, VcdE and VCCCE ending patterns; for b) all single syllable words with VCE pattern only; and for c) all multi-syllable words with the VCE pattern.

The Present Research

Table V-A immediately below shows the same data and utility results, as shown in Table IV, that were obtained in the present study, listed by subject matter area, and by totals.

Table V-A

The Usefulness of the VCE Rule in Pronouncing Two Vowel Words with that Pattern from Elementary Textbooks and Trade Books, as Determined by the Present Study.

Area of Book	Total Words	# Not Conforming	# Conform-ing	Percent of Utility
Reading	994	429	565	56.8%
Science	765	337	428	55.9%
Social Studies	887	367	520	58.6%
Trade	654	256	398	60.9%
Totals	3300	1389	1911	57.9%

The research on Part II listed all 2 vowel VCE pattern words separately from all words with three or more vowels and at least one VCE pattern. This was done because it seemed apparent early in the study the latter group might have a considerable different utility.

Table V-B below shows the results when the rule was used to sound out the pronunciation on all words with **three or more vowels** and **one or more VCE patterns**.

Table V-B

The Usefulness of the VCE Rule in Pronouncing Words with Three or More Vowels and One or More VCE Pattern, from Elementary Textbooks and Trade Books as Determined by the Present Study

Area of Book	Total Words	# Not Conforming	# Conform-ing	Percent of Utility
Reading	274	164	110	40.1%
Science	326	183	143	43.7%
Social Studies	349	209	140	40.1%
Trade	251	148	103	41.0%
Totals	1200	704	496	41.3%

Table V-C below shows the data when two vowel VCE pattern words and three or more vowel VCE pattern words **are grouped together.**

Table V-C

The Usefulness of the VCE Rule in Pronouncing
All Words with One or More VCE
Patterns, as Obtained in the
Present Study

Area of Book	Total Words	# Not Conforming	# Conform-ing	Percent of Utility
Reading	1178	543	635	53.9%
Science	1033	485	548	53.0%
Social Studies	1236	576	660	53.4%
Trade	905	404	501	55.4%
Totals	4352	2008	2344	53.7%

The data of the present research is remarkably close to the percent of utility obtained when the VCE rule is applied to all the words in the dictionary, containing that pattern. (Greif 1987) The utility is higher on single syllable words containing the VCE patterns, as compared to multi-syllable words with VCE patterns, as comparing Table V-A with Table V-B shows.

There is not much difference in utility from one subject area to another. Trade books show only a slightly higher utility in Table V-A and Table V-C.

There is little difference in utility across the grades, the percentages for **one syllable words**, in grades **three-through-six order**, being:

56.1, 57.6, 58.8, and 55.8% for reading
53.7, 58.9, 55.5, and 55.8% for science
63.6, 54.2, 61.2, and 55.7% for social studies
54.7, 68.7, 60.3, and 60.7% for trade books

The utility percentages for **multiple syllable words** containing VCE type patterns, in the **same order**, are:

40.7, 38.1, 43.3, and 46.7% for reading
41.5, 40.7, 53.3, and 41.9% for science
40.0, 43.8, 43.3, and 32.9% for social studies
42.1, 51.6, 38.9, and 39.0% for trade books

This VCE rule is another rule that clearly appears to be **very bad advice to children.**

Part III

The Topic

Part III of this report pertains to the usefulness of the following rule when used to pronounce the pattern-indicated words:

> **When the only vowel in a one syllable word is not the last letter it is pronounced as short. (VC)**

The Previous Research

Table IV below shows the results obtained by six previous researchers in **seven research projects** on the usefulness of the above stated phonics rules when used to sound out the pronunciation of words.

Table VI

Utility of the Phonics Rule, "A Vowel in the Middle of a One-Syllable Word is Short," as Found by the Seven Previous Researchers Listed.

Researcher	Total # of Such Words in Sample	# Not Conforming	# Conforming To Rule	% of Utility
Clymer (1961)	447	119	328	73%
Clymer (1963)	657	249	408	62%
Bailey (1967)	1021	291	730	71%
Emans (1967)	139	38	101	72%
Dzama (1975)	420	118	302	72%
Bieri (1977)[1]				80%
Greif (1987)[2]	1835	578	1257	68%

[1]Bieri reported only percent of utility.
[2]Greif used an improved statement of the rule.

The Present Research

Table VII immediately below shows the same data and utility results as shown in Table VI, which were obtained in the present study, listed by subject matter area and be total.

Table VII

The Usefulness of the Closed Syllable Rule (VC) in Pronouncing Words from Elementary Text and Trade Books as Determined by the Present Study

Area of Book	Total Words	# Not Conforming	# of Words Conforming	Percent of Utility
Reading	2958	1205	1753	59.3%
Science	2222	885	1337	60.2%
Social Studies	2540	1082	1458	57.4%
Trade	2082	829	1253	60.2%
Totals	9802	4001	5801	59.2%

The data of the present research is quite close in utility to that obtained on all such words in the dictionary, which is 68%. It seems clear that word selection for texts in all areas did not favor this phonics rule much, if any.

The range of utility percentages across the grades for this VC (only vowel in a closed syllable word) rule, **in grade three-through-six order are**:

61.9, 59.4, 62.8, and 59.3% for reading.
62.7, 59.1, 56.4, and 62.4% for science.
58.3, 60.7, 52.1, and 60.2% for social studies.
55.5, 56.6, 60.6, and 65.8% for trade books.

There is little difference between the areas across the grades, except for third grade and sixth grade trade books.

Clymer and the other researchers used 75% as the utility below which they recommend a rule not be taught. That is really a liberal utility level. Where else in life would we accept 75% as satisfactory usefulness -- except maybe for winning the lottery or being cured of cancer or AIDS.

Even with a utility of 60% or so, teaching children to use this rule to pronounce words is still **bad advice to children**.

Part IV

The Topic

Part IV of this report of the results pertains to the usefulness of the following rule when used to sound out the pronunciation of the pattern-indicated words:

> **When the only vowel in a one syllable word is the last letter it is pronounced as long -- the open syllable rule. (CV)**

The Previous Research

Table VIII below shows the results obtained by six previous researchers in **seven research projects** on the usefulness of the above-stated phonics rule when used to sound out the pronunciation of words.

Table VIII

Utility of the Open Syllable Phonics Rule (CV)
as Found by Six Previous Researchers

Researcher	Total # of Such Words in Sample	# Not Conforming	# Conforming to Rule	% of Utility
Clymer (1961)	27	6	21	78%
Clymer (1963)	31	8	23	74%
Bailey (1967)	38	9	29	76%
Emans (1967)	3	2	1	33%
Dzama (1975)	21	5	16	76%
Bieri (1977)[1]				0%
Greif (1987)[2]	72	32	40	55%

[1]Bieri reported only percent of utility.
[2]Includes the letter, y, as a vowel. Excluding the letter, y, the figures are 57, 32, 25, and 44%.

The Present Research

Next, Table IX below shows the data and utility results (as in Table VIII) which were obtained in the present study, listed by subject matter area, and by totals.

Table IX

The Usefulness of the Open Syllable Rule (CV) in Pronouncing One Syllable, One Vowel Words from Elementary School Text and Trade Books, as Determined by the Present Study.

Text Area	Total Words	# Not Conforming	# Words Conforming	% of Utility
Reading	276	93	183	66.3%
Science	184	80	104	56.5%
Social Studies	210	95	115	54.7%
Trade	192	59	133	69.3%
Totals	862	327	535	62%

The data from the present study indicate a higher percent of utility for this CV rule in the areas of reading and trade books than for science and social studies. However, the differences don't mean very much due to the small number of words involved.

Reference to the previous research indicates there are few words to which this rule applies -- only 72 in the entire dictionary. Keep in mind that in this

present study a given word was listed only once for each selection, that is, duplicates were eliminated within each selection, but not across selections. That explains why the total number of words exceeds seventy-two.

It should also be noted that **none** of the words in which the only vowel was the letter, **y**, were placed on the lists shown in Table IX. They were considered the subject of another rule. In every one of them the letter, **y**, was pronounced as long **i**.

The range of percentages across the grades is small. The percentages of utility for the four subject areas across the grades, **in grade three-through-six order**, are:

68.9, 65.5, 65.2, and 66.1% for reading.
56.1, 53.2, 61.4, and 55.8% for science.
54.3, 58.3, 55.0, and 51.7% for social studies.
66.7, 70.2, 71.4, and 68.9% for trade books.

Examination of the 72 one syllable, open syllable words in the dictionary indicates that there are 15 which end in the letter, **y**. All 15 of these are pronounced as long **i**. Of those remaining, about 50% are words so seldom used one hardly recognizes them. There are less than 30 which commonly are used. These along with the 15 which end with **y** are so highly frequently used, a child could hardly avoid putting them in sight vocabulary.

The percentages of utility are low, and teaching children to use this rule would be **bad advice**. Furthermore, the number of words involved is so few, and they are used so very frequently that children should place them in their instant recognition vocabulary, and this is a **second** reason why

suggesting to children to use this rule instead in pronouncing words, is **bad advice.**

Part V

The Topic

Part V of this report of the results of the present study pertains to the usefulness of the following rule when used to syllabilize the pattern-indicated words:

> **In what appears to be a word of more than one syllable, when two vowels are separated by two consonants which are not part of a consonant digraph, the syllable division is made between the two consonants. (VC/CV)**

This is an improved statement of the rule. It accounts for dealing with consonant digraphs, which the traditional statement does not.

The Previous Research

Table X below shows the results obtained by six previous researchers in **seven research projects** on the utility of the above stated syllabication rule.

Table X

The Utility of the VC/CV Syllabication Rule as Reported in Seven Previous Research Projects

Researcher	Total # of VC/CV Patterns in Sample	# of Words Not Conforming To Rule	# of Words Conforming To Rule	Percent of Utility
Clymer (1961)	573	161	412	72%
Clymer (1963)	563	158	405	72%
Bailey (1967)	1689	372	1317	78%
Emans (1967)	811	162	649	80%
Dzama (1975)	443	115	328	74%
Bieri (1978)[1]	--	"over 20"	--	98%
Greif (1987)	16,620	9456	7164	43%

[1]Bieri did not report specific numbers, only percent of utility, and "over twenty" total words.

The Present Research

Then, in Table XI below, is shown the same data and utility results as listed in Table X, which were obtained in the present study, listed by subject matter area and by total.

Table XI

The Usefulness of the VC/CV Syllabication Rule in Syllabicating Words from Elementary School Text and Trade Books, as Determined by the Present Study

Text Area	Total Words	# Words Not Conforming	# Words Conforming	Percent of Utility
Reading	1325	485	840	63.4%
Science	1074	383	691	64.3%
Social Studies	1348	587	761	56.4%
Trade	1153	411	742	64.4%
Total	4900	1866	3034	61.9%

Examination of the data from the present study in Table XI shows a somewhat lower utility for this VC/CV syllabication rule on words in the area of social studies. Uncommon names were not included in the word lists.

Percentages of utility for the areas across the grades, **in grade three-through-six order** are:

61.7, 65.6, 64.2, and 60.6% for reading
45.2, 68.2, 60.4, and 79.9% for science
68.4, 62.4, 43.6, and 65.2% for social studies
56.4, 62.6, 68.5, and 65.4% for trade books

The ranges across the grades were quite wide for social studies and science. In dealing with the science and social studies texts, it was obvious

that to a remarkable degree the words necessary to do justice to the subject were used, certainly limiting any vocabulary control efforts, if indeed there were any.

It appears that in the long run, chances of correctly syllablizing words with a VCCV pattern are about 60%, which some may consider a good utility, but it really isn't. It must be kept in mind that we rarely syllablize words just to syllablize them, but **we do so in order to be able to apply phonics rules**. If syllabication is 60% accurate, and the phonics rule we apply is, say 60% useful, chances of sounding out the correct pronunciation are rather slim, (about 36%) if we syllablize according to this rule.

The only acceptable procedure for dependable syllabication is the use of the dictionary.

Part VII and VIII contain related information on pronouncing multi-syllable words.

Teaching children to use this VC/CV syllabication rule, so they can then apply other phonic rules, is **very bad advice**.

Part VI

The Topic

Part VI of this report pertains to the usefulness of the following rule when used to syllabicate the pattern-indicated words:

> **In what appears to be a word of more than one syllable, when two vowels are separated by one consonant, or one consonant digraph, the syllable division is made before the consonant or digraph. (V/CV)**

This is an improved statement as compared to the traditional way of stating the rule, which does not account for consonant digraphs.

The Previous Research

Table XII below shows the results obtained by six previous researchers in **seven projects** on the utility of the above stated syllabication rule.

Table XII

The Utility of the V/CV Syllabication Rule as Reported in Seven Previous Research Projects

Researcher	Total # of V/CV Patterns in Sample	# of Words Not Conforming to Rule	# of Words Conforming to Rule	Percent of Utility
Clymer (1961)	327	167	160	49%
Clymer (1963)	427	329	188	44%
Bailey (1967)	1283	645	6380	50%
Emans (1967)	659	349	310	47%
Dzama (1975)	321	173	148	46%
Bieri (1978)[1]	--	"less than 20"	--	46%
Greif (1987)	9019	6140	2879	32%

[1]Bieri reported only percent of utility, and for this rule, that he located less than 20 words.

The Present Research

Then, Table XIII, below, shows the same data and utility results as listed in Table XII, which were obtained in the present study, listed by subject matter area and by totals.

Table XIII

The Usefulness of the V/CV Syllabication Rule in Syllabicating Words from Elementary School Text and Trade Books, as Determined by the Present Study

Text Area	Total Words	# Not Conforming	# Words Conforming	Percent of Utility
Reading	1126	685	441	39.4%
Science	1167	699	468	40.1%
Social Studies	1359	893	466	34.3%
Trade	991	614	377	38.0%
Totals	4643	2891	1752	37.7%

The data of the present study indicate close, but very low utility across the subject areas. Social studies is lowest, but even if it were between 38% and 40%, as in the other areas, it wouldn't be any real practical improvement. The utility levels obtained are fairly close to those obtained in previous research.

Utility percentages across the grades, **in grade three-through-six order** are:

43.7, 37.1, 34.7, and 38.8% for reading
37.0, 40.0, 36.4, and 45.8% for science
38.2, 32.2, 27.4, and 45.8% for social studies
39.0, 30.0, 43.4, and 37.2% for trade books.

Considering that syllablizing is done to enable application of phonic rules (of herein demonstrated low utility) to word parts, the chances of sounding out correct pronunciation on multi syllable words are slim. See Part VII and VIII for some further insight on this.

Again, the only dependable procedure for syllablizing words is the use of the dictionary.

The usefulness of this V/CV rule for syllablizing words, so other phonic rules can then be applied, is so low that teaching children to use it is also very **bad advice.**

Part VII

The Topic

Part VII of this report deals with the **possibility of correctly pronouncing all two syllable words** in the selections, using the VV, VCE, closed syllable, and open syllable rules, whichever applied to each syllable.

The Previous Research

Only **one previous research** project has been done, and it involved all two syllable words in the dictionary in which **at least one** syllable was open or closed. (Greif 1987) In that study words were separated into four categories as follows:

1. A group of 799 two syllable words, one syllable a simple open or closed syllable, the other containing the vowel, **y**.
2. A group of 3046 two syllable words, one syllable containing adjacent vowels, the other being a simple open or closed syllable.
3. A group of 2341 two syllable words, one syllable containing a VCE pattern, the other being a simple open or closed syllable.
4. A group of 6830 two syllable words, both syllables being simple open or closed.

The usefulness of the four vowel rules (listed in the first paragraph of Part VIII-A) in producing the correct pronunciation of both syllables of correctly syllablized two syllable words, as obtained in previous research is shown in Table XIV below.

Table XIV

Previous Research Data on the Possibility of Correctly Pronouncing all Correctly Syllablized Two-Syllable Words in the Dictionary, Using the VV, VCE, Open Syllable, and Closed Syllable Rules.

Category #	Total Words in Category	Percent of Correct Single Pronunciation
1	799	12.6%
2	3046	9.3%
3	2341	30.5%
4	6830	24.0%
All four	13,016	19.1%

In the first three categories above, a second rule is involved in addition to the open or closed syllable rules. That is what accounts for the fairly wide variance in percentages. For example, category two involves the VV rule and that has a very low utility. Category three involves the VCE rule, and that has a higher utility. The influence of both shows in the 9.3% and the 30.5% respectively.

The Present Research

The present research differs slightly from the previous research. First, the two syllable words used were not restricted to those which contained at least one open or closed syllable. Secondly they were not categorized into subgroups but dealt with as one large group of two syllable words.

The results of the present research indicate that of the total of 10,490 such two syllable words in all four text areas, the possibility of correctly pronouncing them are as shown in Table XV, which follows.

Table XV

The Present Research Data on the Possibility of Correctly Pronouncing all the Two-Syllable Words in the Text Selections, Using the VV, VCE, Open Syllable, and Closed Syllable Rules

Text Area	Total Words	# Not Conforming	# Words Conforming	Percent Correctly Pronounced
Reading	2819	2270	549	19.5%
Science	2351	1971	380	16.2%
Social Studies	2968	2545	423	14.3%
Trade	2352	1894	458	19.5%
Totals	10,490	8680	1810	17.3%

In considering the data from the previous research, and from the present study, keep in mind that in both cases **all the words were syllablized correctly** according to the dictionary. It is **only the application of the four phonic rules** for vowels that accounts for the results.

The data for reading and trade books in the present study are quite similar to those in the previous research but the data in the present study is somewhat lower for social studies and science books. As previously noted, the use of

the proper vocabulary to do justice to the subject, (as was quite obvious in areas of social studies and science) precludes vocabulary control.

From this part of the study it seems apparent that the use of phonic analysis to sound out pronunciation of two syllable words is **worse than bad advice to children.**

Part VIII - A

The Topic

Part VIII - A of this report deals with the possibility of correctly pronouncing three syllable words in the selections, using the VV, VCE, Closed Syllable, and Open Syllable rules.

The Previous Research

Only **one previous research** has been done. (Greif 1987) In that research it was reported that of 19,427 three syllable words in the dictionary, in only 602 of them, or 3.1%, could all three syllables correctly be pronounced using the four rules identified above. In that study, all words were syllablized correctly **prior** to the application of the rules. In real life, the child would first need to syllablize them. Research data indicates a less than 50/50 chance of correctly syllablizing **two** syllable words, using the two most popular rules. The chances for correctly syllablizing three syllable words would be fewer, because of the extra syllable involved.

The Present Research

The present study used a limited selection for the three syllable word portion, as compared to the words in the other parts of this study. Only twenty-one selections of five full pages of text were used, seven from each area, reading, science and social studies. The words were **syllablized** according to the dictionary **prior to the application** of the rules. Table XVI below shows the number of three syllable words for each of the three areas, and the number of words that correctly could be pronounced using the four indicated rules.

Table XVI

The Possibility of Correctly Pronouncing Three Syllable Words, Correctly Syllablized, Using the VV, VCE, VC and CV Rules

Text Area	# of Words	# Correctly Pronounced	Percent
Reading	124	4	3.2%
Science	145	9	6.2%
Social Studies	129	2	1.6%
Total	498	15	3.0%

Keep in mind that these results were obtained on words which were syllablized correctly according to the dictionary prior to applying the rules.

In actual reading situations, the child first would have to syllablize the words according to two popular rules that produce the correct syllables less than 50% of the time.

It seems superfluous to write that recommending the use of phonics to pronounce three syllable words, even correctly pre-syllablized, is **very, very bad advice**.

Part VIII - B

The Topic

Data in Parts III, IV, and VII of this study indicate that the more syllables in a word, the less the chance of pronouncing them correctly using the phonics rules in this study.

This part deals with a comparison of the usefulness of such phonics in correctly pronouncing one, two and three syllable words.

The Previous Research

Previous research on the usefulness of the four rules of the study to pronounce one, two and three syllable words is shown in Table XVII, below. All of the previous research shown in that table used the entire dictionary as the word source. (Greif 1987 ED# 277-983, 984, 985 and 278942).

Table XVII

The Usefulness, According to Previous Research of the Four Phonics Rules in the Present Study when Used to Pronounce One, Two, and Three Syllable Words

Type of Word	Total Number of the Type		Percent Correctly Pronounced
One syllable, closed syllable	1835	1257	68.0%
One syllable, open	72	40	55.0%
Two syllable	13,016	2846	19.1%
Three syllable	19,427	602	3.1%

The Present Research

The same data, as obtained in the present study, is shown in Table XVIII, below.

Table XVIII

The Usefulness, According to the Present Study of Using the Four Phonics Rules of the Study in Pronouncing One, Two and Three Syllable Words

Type of Word	Total # for Type	# Correctly Pronounced	Percent Correctly Pronounced
One syllable, closed syllable	9802	5801	59.2%
One syllable, open	862	535	62.0%
Two syllable	10,490	1810	17.3%
Three syllable	498	15	3.0%

Both the **previous** research and the **present** research, applied the rules to words **correctly pre-syllablized** according to the dictionary.

Both the previous and present research clearly indicate the larger the number of syllables in a word, the fewer the chances of correctly pronouncing them, reducing to nearly impossible on three syllable words.

Further there is a rather remarkable similarity between the utilities found in the previous and the present research.

If as in the real situation the student had first to syllablize the words according to the usual rules, all these utilities would be drastically lower.

From this comparison of data, it appears phonics has rapidly diminishing returns as children advance through the grades, and encounter more and more multi-syllable words.

Part IX

The Topic

The final part of this study concerns the **number and nature of the words that remained unhighlighted** in the Xerox copies of the text -- words that were not used on any list.

Previous Research

No previous research on this topic has been located.

The Present Research

In doing the highlighting on the Xerox copies of the text, every word exhibiting a pattern pertaining to a given rule was highlighted, duplicates included. The words that remained not highlighted were those words to which none of the rules were applied, and were not included in the list of words in the previous nine parts of this study.

In this part of the study, only twenty-one selections were used, seven for each of the subject areas. Trade books were not included.

Table XIX below shows the data obtained for each area.

Table XIX

Data on the Number of Words Remaining in the Text Samples after all Those Pertaining to the Six Phonics Rules Were Marked

Text Area	Total Words in Texts	# Words Remaining	Percent
Reading	7426	309	4.2%
Science	7356	195	2.7%
Social Studies	8548	238	2.8%
Total	23,330	742	3.2%

An examination of the remaining words reveals that many were the article, a, the pronoun, I, and uncommon names of people and places. There were also a few words of four or more syllables, and a few words such as answer and blindfold to which the two syllabication rules did not apply. In two of the selections from reading texts, **105** of the words were **six names repeated over and over**. Names not listed in the dictionary were not used in the first nine parts of the study.

The results of this part of the study indicate that the 6 phonics rules apply to 97% of the 23,330 words in the twenty-one selections.

Phonics analysis is not recommended for use on unusual names, although children often try to use it. Nor is phonics usually recommended for use on common names, but they can at least be found in the dictionary. The article, **a**, the pronoun, **I**, and a few contractions such as **I'm, we'll, didn't, isn't,** etc. are usually early placed in the instant sight vocabulary.

Phonic rules are almost completely useless in pronouncing the few words which remained after all the lists for other parts of the study were made.

Conclusions

The following conclusions are made with references to the **utility criteria of 75%**, which was accepted by all previous researchers. That is a very generously low percentage. Also, they are based on **one phonics utility figure** per subject area **for all four grades.**

1. The evidence obtained indicates such low utility that **all six of the following phonics rules should no longer be taught** to children **as helpful** in sounding out pronunciations of words, not in any circumstances:

   a) When two vowels are adjacent to each other in a word, the long sound of the first one is pronounced and the second is not pronounced at all.

   b) When two vowels in a word are separated by one or more consonants and one of the vowels is a final **e**, the long sound of the first one is pronounced and the final **e** is not pronounced at all.

   c) When the only vowel in a one syllable word is not the last letter, the short sound is pronounced.

   d) When the only vowel in a one syllable word is the last letter, the long sound is pronounced.

   e) When two vowels are separated by two consonants which are not part of a digraph, the syllable division is made between the consonants.

   f) When two vowels are separated by one consonant or a consonant digraph, the syllable division is made before the consonant or digraph.

2. Evidence indicates there is one rule which could be taught to children as 100% helpful in pronouncing the vowel, and that rule is:

   When the only vowel in a word is the letter, y, and it is the last letter, the sound of long i is pronounced.

3. Evidence indicates that the utilities obtained in previous research, particularly in those which used long lists, are quite typical of those obtained in the present study, and vice versa, of course.

4. Utility figures obtained in the present study, when compared to previous research results, indicate there is little difference in utility figures obtained, whether words are from various lists, the entire dictionary, or from running text in children's books used in grades three, four, five and six.

5. The data on the usefulness of phonics on one, two and three syllable words indicate rapidly decreasing utility as the number of syllables increases, even when the words were correctly pre-syllablized.

6. The evidence indicates there is no difference to speak of in phonic utility between texts from one subject area and another, although reading texts and trade books **occasionally** had a percentage point or two higher utility.

7. The evidence shows that there is little difference to speak of in phonic utility in any one subject area across the grades. Examination of the widest spread in utility across the grade shows that of a possible 160 comparisons, 148 of them had a spread of 4% or less.

8. The data indicates that the words on lists used by previous researchers are, on the basis of utility figures, highly representative of those used in elementary texts, grades three through six.

9. The evidence really does not support the widely held notion that reading text authors control the vocabulary used to favor successful application of phonics when compared to vocabulary used in other areas. (see conclusion number 11)

10. The evidence does not support the notion that authors of subject matter area materials control the vocabulary to favor phonics at any grade level, when compared to reading text vocabulary.

11. The evidence indicates that in subject areas which permit the author greater freedom of selection of words, such as reading and trade books, there is a slightly higher utility for phonics (one or two percent) than in areas such as science and social studies, in which authors are bound by the need to use the correct technical or historical terminology.

With regard to the differences, it should be kept in mind that when utility figures are in the 30's, 40's, and 50's, these utilities are so low that a difference of 5% or so really doesn't change anything very much. Consider the locks on your house, the brakes on your car, or railroad crossing signals, for example. How much more satisfied are you with their operation at 60% efficiency than at 40%? They're intolerable either way.

Miscellaneous Observations

As the study progressed many patterns were observed, the most important of which are shared with you below.

1. When the **college students** applied the four phonic rules to correctly pre-syllablized two syllable words, the large majority complained over and over how complicated and confusing it was. This was the part of the study where they made the most errors. When **elementary school children apply** those rules to multi-syllable words they are not pre-syllablized for them. The children must first syllablize the words themselves using rules we teach them, and which produce correct syllablization about 40 to 60% of the time. The entire procedure must be vastly more complicated and confusing for them.

Hopefully, the college students involved herewith will be teachers who understand that.

2. A majority of the college students seemed to hold the conviction that if a vowel is not short, then it is long, and **vice versa**. Using the word, **come**, for instance, the **o** is obviously not short, so they would conclude it was long, and that the VCE rule works. Or that in the word, **was**, the **a** is not long, so it must be short, and they would then conclude, for example, that the "only vowel in a closed syllable" rule works. Even after this was discussed and it was noted that vowels have other sounds than long and short, it seemed very difficult to take that knowledge into account in making their decisions. Most elementary school children do the same thing. Do we teach that? It appears so. Why?
3. While most of the students made many errors in the part of the study which required application of all four phonic rules to two syllable words, about 40% of them made a considerable number of errors in other parts of the study as well. When these students become teachers and teach children about phonics, one wonders about the accuracy with which they'll be teaching it.
4. It was quite apparent that there was much more repetitive use of words in the reading texts as compared to the texts for the other areas. In reading some of the stories, one sensed that the story would be improved by the removal of some instances of word repetition. In several stories it seemed the purpose of the author was to repeat certain words, rather than to write a coherent story.
5. In determining the pronunciation of vowels in multi-syllable words, it was clear that most of the students disregarded whether a syllable was

accented or not. For instance, in the word such as **consonant**, the vowels were given a **short-long-short** pronunciation, instead of the **short-schwa-schwa** with accent only on the first syllable. Giving every syllable equal accent is, of course, incorrect, but doing so makes it appear that the usefulness of phonics rules involving vowels is greatly improved.

6. Students were directed to refer to the dictionary for correct pronunciations in all parts of the study, unless they were **absolutely sure** they knew the correct pronunciation. As the previous observations 1, 2, 3, and 5 indicate, most of the students seemed to be absolutely sure about a lot of incorrect pronunciations.[1]
7. While the students found the project tedious at times, they were impressed with the insights gained. To a person, they agreed they would never forget the experience and what they learned from it. In fact all of the students said they'd gotten the message, and some asked if we could cut the project short and spend some time figuring out how to teach reading without phonics.
8. When teachers are told of the dubious utility of phonics rules, invariably they say, "Well, **usually**, I always put **usually** in the rules." While the word, usually, may suggest the rule doesn't produce correct pronunciation 100 % of the time, including it in the rules does not make phonic rules less deceitful. According to the dictionary the word, **usually**, means so frequent in occurrence that it is considered a regular and expected, well established, clearly defined pattern of

[1] See Greif's 1987 research on recognition of words taken from Reader's Digest, and from a daily paper, which indicate the same thing.

almost unfailing repetition. Most phonics rules are by no means "**usually**."

Background for the Recommendations

It is worth noting that no recommendations for change were made by any of the previous researchers, except for Greif. They did suggest that perhaps many of the phonics rules should not be used, but they didn't suggest or recommend what to do instead. Perhaps they had a hunch about the harassment, ostracism and stone walls they might spare themselves.

Phonics utility figures certainly give reason to question whether or not pronunciation should be a part of the reading instruction process. If it should not, then that leaves only the traditional whole word, "look-say" approach, which many say is no longer in vogue because it was unsuccessful, and it probably was no more successful than phonic oriented programs.

It is worth noting that both phonic analysis and look-say have one fundamental common element, that is, both require pronunciation to read, that is, changing the printed word to the spoken form to read. It is only the **way in which pronunciation is arrived at**, that is different.

While there are many who seem absolutely sure that the change from printed form to spoken form is necessary for reading, no one has any basis whatsoever for such surety. There is simply **no research whatsoever** which demonstrates either 1) that the printed word must be changed to the spoken word to read, or 2) that pronunciation is, in any way, essential for reading. Nor does common sense support those notions.

There is vast evidence in every school system that, when instructional methods require children to pronounce the words, almost half the children

fail to become efficient readers, even with vast efforts in special remedial programs.

However, there is evidence that hundreds of millions of people read efficiently without pronouncing - the Chinese, the Japanese, musicians reading music, tradesmen reading blueprints, people reading maps, and on and on. In fact, examination of the reading strategies of successful readers shows they have learned, usually despite their instruction, to read from printed word directly to idea.

Nor is it **self-evident** that pronouncing words, however the pronounciation is achieved, is essential to reading. In fact it is self-evident that pronounciation is **not** essential to reading. Consider these principles of word language communication:

1. There are **two forms** of the words language, **vocal** and **graphic**.
2. There are **two activities** that can be done with each form, **sending** and **receiving**.

From these facts, the following four principles are derived:

3. Receiving the graphic (written) form is **reading**.
4. Sending the graphic form is **writing**.
5. Receiving the vocal form is **listening**.
6. Sending the vocal form is **speaking - pronouncing**.

Examine statements 3 and 4. The common element is **graphic** form.

Examine statement 3 and 5. The common element is **receiving**.

Examine statements 3 and 6. There is **no** common element, yet we have based our reading instruction on this, the **least likely** relationship of them

all. Reading is not sending. Reading is not vocal. Reading is **receiving**, and it is **graphic**.

Listening and reading have many common elements, both being receiving activities. Yet we have almost completely disregarded those common elements in reading instruction.

The basic elements of writing and reading are the same -- ideas, media words, and grammar. The **writer** starts with the idea and needs to produce the others. The **reader** is provided the others and needs to (re)produce the idea. What the writer has to start with, the reader needs to produce. What the writer needs to produce, the reader has to start with. Yet until the last two or three years we have almost completely disregarded these relationships in reading instruction, as well.

We have failed to see and/or make use of the relationships that do exist in developing reading instructional procedures. These relationships have existed for centuries for all who would look to see. Instead we have latched on to a most unlikely pseudo-relationship and tried to make it work well. Questioning that relationship has been heretical to say the least.

The Recommendations Themselves

A sensible and efficient reading program must take into account both the indications of phonics utility research, and what we know from self-evident principles of word language communication, and their relationships. Accordingly I make the following recommendations, once more. I recommend that:

1. The primary and exclusive objective of reading must be comprehension - the readers' creation of a duplicate of the authors'

message, and all elements of instruction must clearly relate to that objective.

2. Vocabulary instruction must replace phonics as the single primary means to effective reading. (Keep in mind that **without vocabulary there is no language.**)

3. After vocabulary, the next most important means to effective reading is **instruction** in **how to detect the grammar** of the author in written selections, and how to use that grammar with the meaning(s) of the words to think or create, the duplicate of the author's message. Such instruction must be provided.

4. The vocabulary instruction program must be an experience-based meaning approach.

5. The vocabulary instructional program must result in instant, accurate, certain recognition of the meaning(s) of words, and preferably **meaning(s) only**, for an adequate number of words.

6. The reading program instructional objectives must concern some knowledge or ability that children clearly will need to use the rest of their lives to read.

7. The reading instructional practices must be designed so every child succeeds in every lesson, and so they clearly implement the objective.

8. All reading must be silent reading.

9. There must be no oral reading, neither for practice nor evaluation, neither by the teacher nor the child (see recommendation number 13.)

10. Reading instruction must always provide purposes for reading which the children know and understand before they read. Post-reading questions and/or activities must be shown to, and understood by, the children before they read.

11. There must be no phonics instruction which recommends phonics as helpful in reading (see recommendation number 12.)

12. There may be a program of teaching **about** phonics in which children investigate it's usefulness on words from their own books, but probably not earlier than second grade.

13. There should be a program, preferably apart from reading instruction, in which children are **taught** how, and **helped** to practice effectively to deliver a written message orally to a willing audience.

14. Children must early be given the opportunity and books necessary to read massive amounts of material that is interesting to them, and, at or close to their instructional level, preferably with self-selection and self-timing.

Comments of Two Recommendations

A few words of comment seem in order for recommendations 12 and 13.

With regard to number 12, it is recognized that a large majority of people -- the public, parents, teachers and administrators -- have firm beliefs about the great value, even the absolute necessity of phonics in reading instruction. These beliefs and opinions won't change overnight, and the people who hold them simply would not allow a school completely to drop a phonics program. Children eventually are going to hear about phonics, and how helpful it is claimed to be. Some of them may eventually say, "If I had had phonics I would be a better reader." Children should know about phonics and how well it works -- or doesn't work. A program that implements recommendation number 12 properly will inform the children, as well as satisfy the expectations of the public, parents, teachers and administrators.

With regard to recommendation number 13, again the public, parents, teachers and administrators have very firm beliefs about the importance of oral reading. Like those on phonics, the opinions on oral reading will not change overnight, and the people who hold them simply would not allow oral reading to be dropped completely. In the past when oral reading was temporarily dropped to focus on silent reading, children have been known to

go home and say they didn't have any reading while oral reading was not being done. A program that implements the recommendation number 13 looks very much like oral reading, but is something different, and much more, and will satisfy both the children and the public, parents, teachers and administrators.

The Procedures Exist

Procedures already exist to implement all of these recommendations. College students in ten Reading Laboratory Classes have used them effectively - even though many of them personally believed phonics and oral reading was the essence of reading instruction.

With the exception of one or two, all of the children responded enthusiastically, were aware of their success and achievements every day, and proud of it. Many children began to come early, anxious to get started ten minutes early, and that tells something.

Finally

Progress requires change and improvements. Reading instruction has not been changed substantially in 50 or more years. Our results have been embarrassing to us, and educational violence to the 40% or more of the children who have not learned to read effectively, even with vigorous remedial programs.

We need progress in reading instruction. We need change. Here are some reasons why. Here are some ideas for change. They make sense. Please do

not belittle them. Consider them with a receptive mind. Try them - objectively. Give them a chance to work. They will.

This author is willing to help you.

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